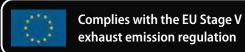
**SK18-1E MINI EXCAVATOR** 

**KOBELCO** 

SK18





We Save You Fuel
Achieving a Low-Carbon Society

# DO FULL-SIZED JOBS WITH A COMPACT MACHINE



Mini excavators are increasingly popular for work in confined spaces such as residential areas and buildings. But smallness alone doesn't satisfy users who also demand greater stability and first-rate operating performance. The KOBELCO SK18 mini excavator answers these needs with a high-output engine that provides plenty of power for tough, efficient operation. It also delivers excellent stability with superior weight distribution, a well-designed, comfortable cab equipped with an LCD monitor, and easy maintenance. These features make the SK18 mini excavator ideal for those who want powerful, basic functions and durable reliability. When you need to do a full-sized job with a compact machine, the SK18 is your answer.

#### COMFORT

### **Pleasant Work Environment**

There is plenty of legroom, and the control lever, wrist rests, travel lever and control panel are all ergonomically positioned so that the operator can work for long hours without fatigue.

#### **Comfortable Suspension Seat**

The reclining, slide seat can be adjusted to match the operator's size and posture.

#### **Wrist Rest**



Wrist rests on the each control lever box ensure fatigue-free operation.

#### **Excellent Air Circulation**

The SK18 has a forced-air heater that keeps the cab comfortable conditions.



#### **Easy Access to Control Panel and Levers**





Travel high/low select switch and throttle lever

#### **Backlit Liquid Crystal Monitor**

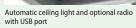
The backlit liquid crystal monitor is provided as standard. Perfectly integrated into the right-hand console, the screen provides excellent visibility even in bright sunlight or at night, giving ready access to information concerning operation and machine status.





#### **Amenities**



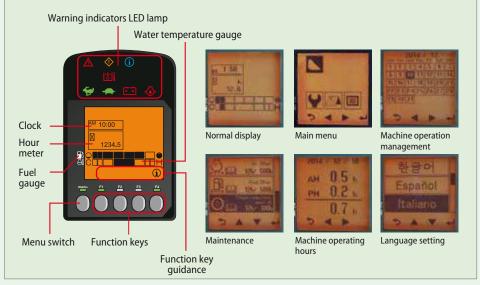




Storage compartment for manuals



Large cup holder



#### PERFORMANCE

# **Compactness and Versatility**

With its compact design, the SK18 delivers fast work performance even in limited spaces.

#### Reliable Swing Power, Faster Working Speed

Boosted swing power and a top-class swing speed deliver shorter cycle times.

Swing Speed:

10min-1

#### **Powerful Digging**

For more efficient work performance.

Max. Arm Crowding Force:

7.4kN

Max. Bucket Digging Force:

15.2kN

#### **Powerful Travel**

**Travel Speed:** 

4.1/2.2 km/h

#### Powerful Engine (ISO 9249)

Power Output: **9.5**kW/**2**,**100**min<sup>-1</sup>

#### **Retractable Crawlers**

Crawlers can be easily extended and retracted by operating a simple lever.





Extended: 1,320mm

#### Easy Extended/Retracted Blade

Dozer blade with pin-type hinge can be easily extended/retracted.





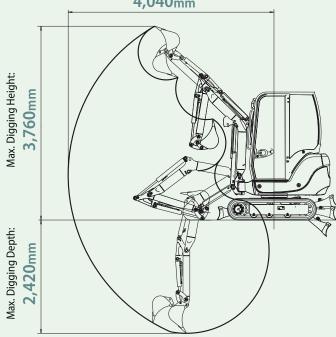
#### **Auxiliary Circuit for Hammer or Auger**

A proportional-control auxiliary line accommodates many accessories such as a hammer or auger, with the oil flow rate optimized for each device.

#### **Wide Working Range**

The SK18 has an impressive working range.

Max. Digging Reach: 4,040mm



## **Easy Transportability**

Weighing just 1,900 kg, the SK18 is easily transported on a 2.7-ton trailer with plenty of room to spare for the simultaneous transport of a bucket or other attachment.



#### **Compact Swing Radius**

The SK18 has a very small swing radius that ensures easy access and efficient operation on sites where space is limited. The compact design keeps power, productivity and stability that allow you to work with confidence.

Minimum front swing radius: 1,540 mm
with boom swing: 1,340 mm

Tail swing radius: 980 mm

Tail overhang: 320 mm

Overall machine width:

1,320 mm

#### **Exceptional Stability and Lifting Strength**

A wide counterweight and excellent weight distribution provide the SK18 with impressive stability and exceptional lifting capacities.

Lifting Capacity: 600kg at 2.0m

(ground level)



#### RELIABILITY

# **Reliable Construction**

The SK18's tough durability makes it ideal for working in tight spaces and keeps repair costs down.

#### **Cylinder Rod Guard**

The cylinder rod guard is fitted as standard for boom cylinder.



#### **LED Work Light**

The LED work light is mounted under the boom to protect it from damage.



#### Dozer

Dozer cylinder rod guard protects dozer cylinder from damage.



#### SAFETY

# **Operator Safety**

The SK18 has a full range of safety features that help prevent or reduce the severity of onsite accidents.

#### **Reliable Cab/Canopy Structure**

The high-strength cab/canopy meets FOPS 1 and TOPS standards for greater operator safety.



#### **Optimum Visibility**

The SK18 is equipped with 3 rear and side view mirrors. The operator can control the work area as well as the area around machine.



#### **Safety Lock Lever**

The safety lock lever permits entry and exit only when the levers are disengaged to prevent accidental operation.



#### Three LED Cab Lights (Optional)

Three LED cab lights can be fitted as option to provide a clear view during nighttime operations. The LED provides a powerful light while reducing energy consumption.





Hammer for emergency exit



#### MAINTENANCE

# **Easy Maintenance**

The engine hood opens fully and components that require the most frequent checks are positioned for easy access, thereby reducing maintenance time.



**Right Side** 



Fuel tank

**Under the Operator's Seat** 



•Generator •Starter motor

# Easy Access to Engine Compartment

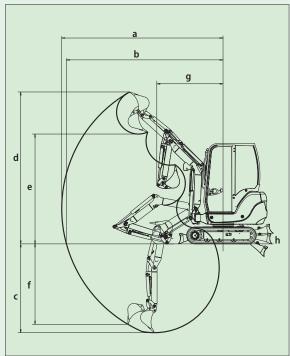


Radiator over flow bottle

# **Specifications**

MODEL   SK18   Type	GENERAL									
PERFORMANCE	MODEL			SK18						
Shoe Type	Type		SK18-1E							
Bucket Capacity	PERFORMANCE									
Travel Speed (high/low)         km/h         4.1/2.2           Swing Speed         min¹ {rpm}         10.0           Gradeability         % (degree)         47 (30)           Traction Force         kN         17           Bucket Digging Force         kN         15.2           Arm Crowding Force         kN         7.4           WEIGHT           Machine Mass         Cab         kg         1,900           Ground Pressure         Cab         kPa         31.4           Canopy         kg         1,760         31.4           Canopy         kPa         28.5         28.5           ENGINE           Model         YANMAR 3TNV70-VBVA2         YASA         YANMAR 3TNV70-VBVA2         YANMAR 3TNV70-V	Shoe Type			Rubber						
Swing Speed         min¹¹{rpm}         10.0           Gradeability         % (degree)         47 (30)           Traction Force         kN         17           Bucket Digging Force         kN         15.2           Arm Crowding Force         kN         7.4           WEIGHT           Machine Mass         Cab         kg         1,900           Ground Pressure         Cab         kPa         31.4           Ground Pressure         Cab         kPa         31.4           Canopy         kPa         28.5           ENGINE           Model         YANMAR 3TNV70-VBVA2           Type         Water cooled           Power Output NET         (ISO9249)         kW/min¹{rpm}         9.9/2,100           Max. Torque NET         (ISO9249)         kW/min¹{rpm}         9.9/2,100           Max. Torque NET         (ISO9249)         N-m/min¹{rpm}         49.3/1,500           Displacement         L         0.854           Fuel Tank         L         24.5           HYDRAULIC SYSTEM           Pump         Variable pump           Max. Discharge Flow         L/min         48.3           Relief Valve Setti			m³	0.05						
Gradeability	Travel Speed (high/lov	v)	km/h	4.1/2.2						
Traction Force         kN         17           Bucket Digging Force         kN         15.2           Arm Crowding Force         kN         7.4           WEIGHT           Machine Mass         Cab         kg         1,900           Ground Pressure         Cab         kPa         31.4           Canopy         kPa         28.5           ENGINE           Model         YANMAR 3TNV70-VBVA2           Type         Water cooled           Power Output NET         (ISO9249)         kW/min¹ (rpm)         9.5/2,100           Max. Torque NET         (ISO9249)         kW/min¹ (rpm)         9.9/2,100           Max. Torque NET         (ISO9249)         N·m/min¹ (rpm)         49.3/1,500           Displacement         L         0.854         1           Fuel Tank         L         24.5         1           HYDRAULIC SYSTEM         Variable pump         Variable pump         48.3           Relief Valve Setting         MPa         20.0         2           Hydraulic Oil Tank (system)         L         20 (28.5)         2           DOZER BLADE         Width x Height         mm         980/1,320 x 230           W	Swing Speed		min <sup>-1</sup> {rpm}	10.0						
Bucket Digging Force	Gradeability		% (degree)	47 (30)						
Arm Crowding Force         kN         7.4           WEIGHT           Machine Mass         Cab         kg         1,900           Ground Pressure         Cab         kPa         31.4           Canopy         kPa         28.5           ENGINE           Model         YANMAR 3TNV70-VBVA2           Type         Water cooled           Power Output NET         (ISO9249)         kW/min¹ {rpm}         9.5/2,100           Max. Torque NET         (ISO9249)         kW/min¹ {rpm}         9.9/2,100           Max. Torque NET         (ISO9249)         N·m/min¹ {rpm}         49.3/1,500           Displacement         L         0.854           Fuel Tank         L         24.5           HYDRAULIC SYSTEM         Pump         Variable pump           Max. Discharge Flow         L/min         48.3           Relief Valve Setting         MPa         20.0           Hydraulic Oil Tank (system)         L         20 (28.5)           DOZER BLADE           Width x Height         mm         980/1,320 x 230           Working Ranges (height/depth)         mm         240/300           SIDE DIGGING MECHANISM         Type	Traction Force		kN	17						
WEIGHT           Machine Mass         Cab         kg         1,900           Ground Pressure         Cab         kPa         31.4           Canopy         kPa         28.5           ENGINE           Model         YANMAR 3TNV70-VBVA2           Type         Water cooled           Power Output NET         (ISO9249)         kW/min¹ {rpm}         9.5/2,100           Max. Torque NET         (ISO9249)         kW/min¹ {rpm}         9.9/2,100           Max. Torque NET         (ISO9249)         N·m/min¹ {rpm}         49.3/1,500           Displacement         L         0.854           Fuel Tank         L         24.5           HYDRAULIC SYSTEM         Variable pump           Pump         Variable pump           Max. Discharge Flow         L/min         48.3           Relief Valve Setting         MPa         20.0           Hydraulic Oil Tank (system)         L         20 (28.5)           DOZER BLADE           Width x Height         mm         980/1,320 x 230           Working Ranges (height/depth)         mm         240/300           SIDE DIGGING MECHANISM           Type         Boom swing	Bucket Digging Force		kN	15.2						
Machine Mass         Cab         kg         1,900           Ground Pressure         Cab         kPa         31.4           Canopy         kPa         28.5           ENGINE         Model         YANMAR 3TNV70-VBVA2           Type         Water cooled           Power Output NET         (ISO9249)         kW/min¹¹ (rpm)         9.5/2,100           Max. Torque NET         (ISO9249)         N-m/min¹¹ (rpm)         9.9/2,100           Max. Torque NET         (ISO9249)         N-m/min¹¹ (rpm)         49.3/1,500           Displacement         L         2.854           HYDRAULIC SYSTEM         Pump         Variable pump           Max. Discharge Flow         L/min         48.3 <td rows<="" td=""><td>Arm Crowding Force</td><td></td><td>kN</td><td>7.4</td></td>	<td>Arm Crowding Force</td> <td></td> <td>kN</td> <td>7.4</td>	Arm Crowding Force		kN	7.4					
Canopy   kg   1,760	WEIGHT									
Canopy   Kg   1,760	Machine Mass	Cab	kg	1,900						
Canopy   KPa   28.5	Wacriffle Wass	Canopy	kg	1,760						
Canopy   KPa   28.5	Ground Pressure	Cab	kPa	31.4						
Model	Glound Flessure	Canopy	kPa	28.5						
Type	ENGINE									
Power Output NET	Model			YANMAR 3TNV70-VBVA2						
Name	Type			Water cooled						
(ISO14396)   kW/min <sup>-1</sup> (rpm)   9.9/2,100	Power Output NFT	(ISO9249)	kW/min <sup>-1</sup> {rpm}	9.5/2,100						
Displacement   L   0.854	Tower output NET	(ISO14396)	kW/min <sup>-1</sup> {rpm}	9.9/2,100						
Fuel Tank  HYDRAULIC SYSTEM  Pump  Max. Discharge Flow  L/min  Relief Valve Setting  Hydraulic Oil Tank (system)  DOZER BLADE  Width x Height  Working Ranges (height/depth)  SIDE DIGGING MECHANISM  Type  To the left  L 24.5  Wariable pump  Variable pump  A8.3  A8.	Max. Torque NET	(ISO9249)	N·m/min-1 {rpm}	49.3/1,500						
HYDRAULIC SYSTEM  Pump  Max. Discharge Flow L/min A8.3  Relief Valve Setting MPa 20.0  Hydraulic Oil Tank (system) L 20 (28.5)  DOZER BLADE  Width x Height Mm 980/1,320 x 230  Working Ranges (height/depth) Mm 240/300  SIDE DIGGING MECHANISM  Type Boom swing Offset Angle To the left degree 40			L	0.854						
Pump         Variable pump           Max. Discharge Flow         L/min         48.3           Relief Valve Setting         MPa         20.0           Hydraulic Oil Tank (system)         L         20 (28.5)           DOZER BLADE           Width x Height         mm         980/1,320 x 230           Working Ranges (height/depth)         mm         240/300           SIDE DIGGING MECHANISM           Type         Boom swing           Offset Angle         To the left         degree         40	Fuel Tank		L	24.5						
Max. Discharge Flow         L/min         48.3           Relief Valve Setting         MPa         20.0           Hydraulic Oil Tank (system)         L         20 (28.5)           DOZER BLADE           Width x Height         mm         980/1,320 x 230           Working Ranges (height/depth)         mm         240/300           SIDE DIGGING MECHANISM           Type         Boom swing           Offset Angle         To the left         degree         40	HYDRAULIC SYSTEM									
Relief Valve Setting         MPa         20.0           Hydraulic Oil Tank (system)         L         20 (28.5)           DOZER BLADE           Width x Height         mm         980/1,320 x 230           Working Ranges (height/depth)         mm         240/300           SIDE DIGGING MECHANISM           Type         Boom swing           Offset Angle         To the left         degree         40	Pump			Variable pump						
Hydraulic Oil Tank (system)   L   20 (28.5)			•	48.3						
DOZER BLADE  Width x Height mm 980/1,320 x 230  Working Ranges (height/depth) mm 240/300  SIDE DIGGING MECHANISM  Type Boom swing  Offset Angle To the left degree 40	Relief Valve Setting		MPa	20.0						
Width x Height         mm         980/1,320 x 230           Working Ranges (height/depth)         mm         240/300           SIDE DIGGING MECHANISM           Type         Boom swing           Offset Angle         To the left         degree         40	Hydraulic Oil Tank (sys	tem)	L	20 (28.5)						
Working Ranges (height/depth) mm 240/300  SIDE DIGGING MECHANISM  Type Boom swing  Offset Angle To the left degree 40	DOZER BLADE									
Type Boom swing  Offset Angle To the left degree 40			mm	980/1,320 x 230						
Type Boom swing  Offset Angle To the left degree 40	Working Ranges (heigh	nt/depth)	mm	240/300						
Offset Angle To the left degree 40	SIDE DIGGING MECHANISM									
Offset Angle	Type Boom swing									
To the right degree 80	Offset Angle	To the left	degree	40						
	Oliset Aligie	To the right	degree	80						

# **Working Ranges**

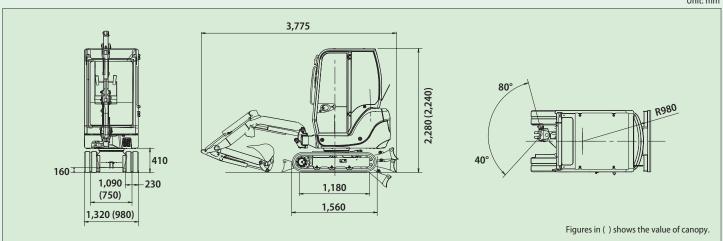


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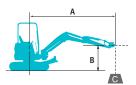
		01111111111
M	DDEL	SK18
a-	Max. digging reach	4,040
b-	Max. digging reach at ground level	3,950
C-	Max. digging depth	2,420
d-	Max. digging height	3,760
e-	Max. dumping clearance	2,740
f-	Max. vertical wall digging depth	2,140
α-	Min. swing radius	1,540
g-	Min. swing radius at boom swing	1,340
h-	Dozer blade (height/depth)	240/300

# **General Dimensions**

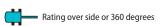
Unit: mm



#### **Lifting Capacities**







A: Reach from swing centerline to arm top
B: Arm top height above/below ground
C: Lifting capacities in kilograms
Shoe: Rubber shoe Dozer blade: Up
Relief valve setting: 20.0 MPa

#### CAB

SK18		Arm: Standard Bucket: Without Shoe: 230 mm										
A		1.5 m		2.0	) m	2.5 m		3.0 m		At Max. Reach		
В		<u> </u>	<del></del>	1	<del></del>	-	<del></del>	<u> </u>	<del></del>	<u> </u>	<del></del>	Radius
2.5 m	kg							*260	*265	*270	*275	3.1 m
2.0 m	kg					*220	*255	*260	*265	*275	*285	3.3 m
1.5 m	kg			*310	*360	*295	*310	*280	*295	*280	*290	3.5 m
1.0 m	kg			*455	*500	*350	*375	*305	*325	*295	*295	3.5 m
0.5 m	kg			*560	*600	*410	*440	*330	*350	*295	*300	3.5 m
G. L.	kg	*725	*840	*600	*610	385	*470	*365	*365	*310	*310	3.4 m
0.5 m	kg	*685	*780	470	*600	355	*400	*350	*350	*315	*325	3.3 m
-1.0 m	kg	*915	*830	480	*590	*425	*440			*330	*340	3.0 m
-1.5 m	kg	*775	*720	*495	*495					*345	*335	2.5 m

#### **CANOPY**

SK18		Arm: Standard Bucket: Without Shoe: 230 mm										
A		1.5 m		2.0 m		2.5 m		3.0 m		At Max. Reach		
В		<u> </u>	<del></del>	<u> </u>	<del></del>	<u> </u>	<del></del>	1	<del></del>	<u> </u>	<del></del>	Radius
2.5 m	kg							*260	*265	*270	*275	3.1 m
2.0 m	kg					*220	*255	*260	*265	*275	*285	3.3 m
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1.0 m	kg			*455	*500	*350	*375	*305	*325	235	*295	3.5 m
0.5 m	kg			*560	*600	*410	*440	*330	*350	235	*300	3.5 m
G. L.	kg	*725	*840	475	550	350	*470	275	*365	235	265	3.4 m
0.5 m	kg	685	780	485	540	355	400	280	315	255	*325	3.3 m
-1.0 m	kg	*915	*830	460	525	350	*440			280	*340	3.0 m
-1.5 m	kg	*775	*720	*495	*495					*345	*335	2.5 m

#### Notes:

- Do not attempt to lift or hold any load that is greater than these lift capacities at their specified lift point radius and heights. Weight of all accessories must be deducted from the above lift capacities.
- Lift capacities are based on machine standing on level, firm, and uniform ground. User must make allowance for job conditions such as soft or uneven ground, out of level conditions, side loads, sudden stopping of loads, hazardous conditions, experience of personnel, etc.
- 3. Arm top defined as lift point.

- 4. The above lifting capacities are in compliance with ISO 10567. They do not exceed 87% of hydraulic lifting capacity or 75% of tipping load. Lifting capacities marked with an asterisk (\*) are limited by hydraulic capacity rather than tipping load.
- Operator should be fully acquainted with the Operator's and Maintenance Instructions before operating this machine. Rules for safe operation of equipment should be adhered to at all times.
- Lift capacities apply to only machine as originally manufactured and normally equipped by KOBELCO CONSTRUCTION MACHINERY CO., LTD.

Note: This catalog may contain attachments and optional equipment that are not available in your area. And it may contain photographs of machines with specifications that differ from those of machines sold in your areas. Please consult your nearest KOBELCO distributor for those items you require. Specialist equipment is needed to use this machine in demolition work. Before using it please contact your KOBELCO dealer.

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Inquiries To:	Inq	uiri	ies	To:
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